

2023
M.Sc.
Second Semester
CORE – 07
GEOLOGY
Course Code: MGLC 2.31
(Mineral Exploration & Mining Geology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Elaborate on the different geological models of exploration planning. 14
2. Write notes on the following: 7×2=14
 - (a) Pitting and trenching
 - (b) Sampling methods

UNIT-II

3. Write in detail about the concept and principle of gravity method of prospecting. 14
4. Write notes on the following: 7×2=14
 - (a) Basic principles of seismic wave refraction
 - (b) Seismic data acquisition

UNIT-III

5. Explain the concept and principle of electrical resistivity method. 14
6. Explain the concept and principle of airborne geophysical survey. 14

UNIT-IV

7. Discuss about the various geochemical rock surveys. 14

8. Write notes on the following: 7×2=14
(a) Primary and secondary environment
(b) Remote sensing in exploration

UNIT-V

9. Write notes on the following: 7×2=14
(a) Diamond drilling
(b) Winzing and stoping
10. Discuss about the various mining hazard procedures carried out in mining. 14
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